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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,878	06/27/2003	Ramez E.N. Shehada	064693-0070	7081

7590 10/30/2006

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EXAMINER
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JAWORSKI, FRANCIS J

ART UNIT	PAPER NUMBER
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3768

DATE MAILED: 10/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/607,878

Applicant(s)

SHEHADA

Examiner

Jaworski Francis J.

Art Unit

3768

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-5 and 7-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7-18,21,22,24 and 27-32 is/are rejected.
- 7) ☒ Claim(s) 19,20,23,25 and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/3/06</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 , 3, 7, 14-15, 24, 27, 30 as amended are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (US4222274) in view of Kruger (US62160Z5). The former is directed to a breast tomography scanner having stationary and vertically rotational and at least partially vertically movable chamber (via drive 66) within a support table with central hole and to which a rim-based ultrasound transmitter and receiver are coupled, however the stationary chamber is internal to the rotatable chamber. It would have been obvious however in view of Kruger to have a movable chamber or bowl rotatable via shaft and bearing having the acoustic coupling media 18 and positioned within the stationary chamber also housing couplant 18 since Kruger notes that when acoustic piezoceramic devices are attached to the movable chamber there are fewer such devices needed as they are positionally tracked in vertical rotational movement with the bowl .It would have been inherently obvious to allow fluid communication holes between inner and outer surrounding chambers in this circumstance since this allows fluid ingress and drainage without tipping or wetting the drive train components.

In Kruger the level of the rotatable chamber is slightly below the surrounding chamber.

Claims 4 – 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Kruger as applied to claim above, and further in view of Hassler et al (US4478083) which evidences that such transducers as are used in the former may be installed within a housing as per col. 2 mid-portion discussion. Otherwise it is inherent in the meaning of a housing to include a form of surroundment for the device being housed. Both references show a downward taper in the vicinity of the table opening.

Claims 8 – 13, 16, 18, 28 – 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Kruger as applied to claim 27 above, and further in view of Dick et al (US4233988). Whereas the former are silent as to the essential draining which must occur, it would have been obvious in view of the latter to provide inner basin draining 52 to serve as a leakage collection tray and overflow draining as shown in Fig. 2 elements 57, 58y and so as to not wet the patient outside the breast area. Plumbing drainholes are typically plural in number so as to screen debris while functioning as fluid ports.

Claim 17 rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claim 16 above, and further in view of Gardineer et al (US4282880) insofar as the latter in fig. 2 would teach suction withdrawal of chamber fluids in order to drain or re-circulate.

Claims 21 – 22 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Kruger as applied to claim 14 above, and further in view of linuma (US4252125) which evidences that it would have been obvious to

egress transducer wiring down the central shaft of the breast-engaging chamber since this is a location of minimal fatiguing movement, and to taper the bottom of the fluid containment chambers towards the drain..

Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Kruger as applied to claim 1 above, and further in view of Shmulewitz (US5479927) since the latter evidences col. 9 lines 45 – 50 that the use of surfactant in association with transducer coupling would have been well-known.

#### ***Allowable Subject Matter***

Claims 19 – 20, 23, 25 - 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### **Response to amendatory Arguments**

The uncovering of additional art has mooted the previous rejection arguments however it is the Examiner's opinion that vertical rotation of an inner, movable chamber is an obvious variant within the art for the advantage of reducing sensor/transducer number as discussed above.

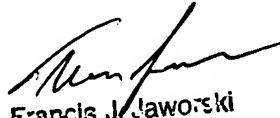
**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Jaworski Francis J. at telephone number 571-272-4738.

FJJ:fjj

10222006



Francis J. Jaworski  
Primary Examiner